



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,454	02/26/2004	Sarvar Patel	29250-002013/US	4912

7590 07/31/2007
HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 8910
Reston, VA 20195

EXAMINER

TOLENTINO, RODERICK

ART UNIT	PAPER NUMBER
----------	--------------

2134

MAIL DATE	DELIVERY MODE
-----------	---------------

07/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/786,454

Applicant(s)

PATEL ET AL.

Examiner

Roderick Tolentino

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date 08/04/2005.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1 – 24 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Rezaiifar et al. U.S. Patent No. (6,980,658).
4. As per claim 1, Rezaiifar discloses deriving a value of a first cryptosync for the communication session based on a value of a second cryptosync (Rezaiifar, Col. 2 Lines 25 – 38, creates two cryptosync values), the second cryptosync having a longer life than the first cryptosync (Rezaiifar, Col. 4 Lines 46 – 62, cryptosyncs are time values and its value will vary depending on transmitted data, therefore one value will last longer than another).
5. As per claim 2, Rezaiifar discloses the second cryptosync is used for message encryption by at least one of the two devices (Rezaiifar, Col. 3 Lines 36 – 45, mobile devices and base stations).

Art Unit: 2134

6. As per claim 3, Rezaiifar discloses the second cryptosync is used for verifying message integrity by at least one of the two devices (Rezaiifar, Col. 2 Lines 39 – 48, verification).

7. As per claim 4, Rezaiifar discloses the second cryptosync is used for verifying message integrity by at least one of the two devices (Rezaiifar, Col. 2 Lines 39 – 48, verification).

8. As per claim 5, Rezaiifar discloses the second cryptosync changes between communication sessions (Rezaiifar, Col. 6 Lines 41 – 44, different cryptosyncs).

9. As per claim 6, Rezaiifar discloses deriving step derives the first cryptosync as at least a portion of the second cryptosync (Rezaiifar, Col. 2 Lines 25 – 38, creates two cryptosync values).

10. As per claim 7, Rezaiifar discloses the deriving step derives the first cryptosync as at least a portion of the second cryptosync and a fixed bit sequence (Rezaiifar, Col. 4 Lines 46 – 62, bit sequence).

11. As per claim 8, Rezaiifar discloses the deriving step derives most significant bits of the first cryptosync as the portion of the second cryptosync and derives least significant bits of the first cryptosync as the fixed bit sequence (Rezaiifar, Col. 4 Lines 46 – 62, bit sequence).

12. As per claim 9, Rezaiifar discloses the fixed bit sequence is a string of 0s (Rezaiifar, Col. 9 Lines 11 – 22, EID value of Zero).

13. As per claim 10, Rezaiifar discloses the deriving step derives a 32 most significant bits of the first cryptosync as the second cryptosync and derives a 32 least

significant bits of the first cryptosync as a string of 0s (Rezaiifar, Col. 9 Lines 11 – 22, EID value of Zero).

14. As per claim 11 Rezaiifar discloses the deriving step derives a portion of the first cryptosync as the second cryptosync (Rezaiifar, Col. 2 Lines 25 – 38, creates two cryptosync values).

15. As per claim 12, Rezaiifar discloses the deriving step derives a first portion of the first cryptosync as the second cryptosync and derives a second portion of the first cryptosync as a fixed bit sequence (Rezaiifar, Col. 4 Lines 46 – 62, bit sequence).

16. As per claim 13, Rezaiifar discloses the fixed bit sequence is a string of 0s (Rezaiifar, Col. 9 Lines 11 – 22, EID value of Zero).

17. As per claim 14, Rezaiifar discloses the deriving step comprises: performing a pseudo-random function on the second cryptosync; and generating the first cryptosync from output of the pseudo-random function (Rezaiifar, Col. 8 Lines 15 – 21, randomly chosen).

18. As per claim 15, Rezaiifar discloses the generating step generates the first cryptosync as the output of the pseudo-random function (Rezaiifar, Col. 8 Lines 15 – 21, randomly chosen).

19. As per claim 16, Rezaiifar discloses the deriving step is performed at a base station (Rezaiifar, Col. 3 Lines 36 – 45, mobile devices and base stations).

20. As per claim 17, Rezaiifar discloses the deriving step is performed at a mobile station (Rezaiifar, Col. 3 Lines 36 – 45, mobile devices and base stations).

21. As per claim 18, Rezaiifar discloses encrypting a frame of information to send from the at least one of the two devices using the first cryptosync (Rezaiifar, Col. 2 Lines 19 – 23, encryption).
22. As per claim 19, Rezaiifar discloses the frame of information is a radio link protocol, RLP, frame (Rezaiifar, Col. 6 Lines 45 – 56, RLP frames).
23. As per claim 20, Rezaiifar discloses incrementing the first cryptosync after the encrypting step (Rezaiifar, Col. 2 Lines 38 - 48, incrementing).
24. As per claim 21, Rezaiifar discloses decrypting a frame of information received at the at least one of the two devices using the first cryptosync (Rezaiifar, Col. 5 Lines 56 – 67, decryption).
25. As per claim 22, Rezaiifar discloses the frame of information is a radio link protocol, RLP, frame (Rezaiifar, Col. 6 Lines 45 – 56, RLP frames).
26. As per claim 23, Rezaiifar discloses incrementing the first cryptosync after the decrypting step (Rezaiifar, Col. 2 Lines 38 – 48, incrementing).
27. As per claim 24, Rezaiifar discloses deriving a value of a first ciyptosync for the communication session based on a value of a second cryptosync used to encrypt further communication between the two devices (Rezaiifar, Col. 2 Lines 25 – 38, creates two cryptosync values).

Conclusion

Art Unit: 2134

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roderick Tolentino whose telephone number is (571) 272-2661. The examiner can normally be reached on Monday - Friday 9am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Roderick Tolentino
Examiner
Art Unit 2134


Roderick Tolentino


KAMBIZ ZAND
SUPERVISORY PATENT EXAMINER